REMARKS

Amendments

In the descriptive part of the specification, a number of minor typographical errors have been corrected. In the claims, amendments have been made to claims 1, 2, 6, and 9 to clarify the direction of propagation of the bulk wave. These amendments have been made solely to more clearly define and recite the present invention.

The Rejection Under 35 USC § 102(b)

Applicants respectfully traverse the rejection of claims 1-14 under 35 USC § 102(b) as anticipated by Knowles (U.S. Patent No. 5,573,077), insofar as the rejection is applicable to the amended claims.

The present invention is directed to a contact detecting device or a coordinate input device which is capable of detecting a touch. A first wave, e.g. a bulk wave (also called a pressure wave or a longitudinal wave), passes through the thickness of a substrate so that the propagation axis crosses, i.e. intersects, the top surface. The first wave is converted into a second wave, e.g. an acoustic wave such as a Rayleigh wave, that is then propagated along an axis parallel to the top surface. The device comprises planar wiring on the bottom (second) surface of the substrate that is connected to an acoustic wave transducer, e.g. a piezoelectric device, that causes the first wave to move toward the top surface. By the use of the planar wiring and the connecting device, the fragility of conventional cable wiring of the piezoelectric device is resolved.

The present invention is distinctly different from Knowles (U.S. Patent No. 5,573,077) in a number of ways. First, Knowles teaches his bulk wave, i.e. a shear wave, propagates parallel to the surface of the substrate, from the piezoelectric transducer that is bonded onto an edge of the substrate. This is in distinct contrast to the present claims, which recite that the bulk wave propagates through the thickness of the substrate, i.e. along an axis crossing the top surface. It is only when the bulk wave of the present invention is converted to a second wave that that second wave propagates along an axis parallel to the top surface. Second, Knowles' first wave is a shear wave, which is distinctly different from the pressure or longitudinal wave used in the present invention. Knowles teaches away from the use of Rayleigh waves (see column 1, line 60 – column 2, line 60), which are an example of the type of second wave for use in the present invention. Therefore, Knowles does not anticipate the present claims.

Clarification of May 10, 2002 Information Disclosure Statement

An Information Disclosure Statement (IDS) was mailed May 10, 2002, citing art that had been included in the International Search Report for International Application No. PCT/JP00/04295, which is the priority document for this application. Also included was art that was identified as having been cited in the International Preliminary Examination Report (IPER) for PCT/JP00/04295. In fact, of the four documents listed as new art included in the IPER, only one document, i.e. European Publication No. 0354117, was newly cited in the IPER. The other three documents listed as newly cited were, in fact, cited in a related application, International Application No. PCT/JP00/04296. One of those documents, Japanese Utility Model 04-136872 U (FDK Corporation), was cited as an "A" reference ("general state of the art") by the Japanese Patent Office in the International Search Report for PCT/JP00/04296. The other two documents, i.e. Japanese Publication No. JP 61-193492 (Mitsubishi Petrochemical Co., Ltd.) and Japanese Utility Model Application No. 129222/1986 (NEC Corporation; laid open No. 36071/1988) were referred to in the IPER for PCT/JP00/04296. Copies of each of these documents have already been submitted, and the Examiner has signed the Form PTO-1449 that accompanied the May 10, 2002 IDS. A copy of the IPER for PCT/JP00/04296 is attached, although it is not listed on a Form PTO-1449. International Application No. PCT/JP00/04296 is the priority document for Application No. 10/019,587, filed March 13, 2002, and being examined in Art Unit 2181.

The IPER for PCT/JP00/04295 did refer to three documents in addition to European Publication No. 0354117. Those three documents, i.e. Japanese Publication No. 10-240443, Japanese Publication No. 56-137989, and Japanese Publication No. 295,467, had all previously been cited in the International Search Report for PCT/JP00/04295, were listed on the IDS, and copies were sent.

Conclusion

It is believed that this application is now in condition for allowance and such action at an early date is earnestly requested. If, however, there are any outstanding issues which can be usefully discussed by telephone, the Examiner is asked to call the undersigned.

Respectfully submitted,

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